

V Band Medium Power Amplifier



Product Overview

AT-PA-5565-1620 is power amplifier with +20dBm output power in the frequency of 55-65GHz. The DC power requirement is +5V/470mA. The module is with a standard WR-15 waveguide.

The power amplifier has high gain, high linearity, low input/output return loss and flat gain response.

It can also be used from 52-70GHz with some variation of performance.

More information, please visit www.atmicrowave.com

Advantages

- ✓ Frequency: 55-65GHz
- ✓ Psat:+20dBm
- ✓ Small signal gain: 16dB
- ✓ Single Power Supply

Application

- ✓ V Band Communication
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

Key Features

Parameter	Min	Typical	Max
Frequency		55-65GHz	
Gain	14	16dB	
Drain Supply		+5V	+8V
P1db		+18dBm	
Psat		+20dBm	
Current quiescent		275 mA	
Current at Psat		470mA	500mA
Input Return Loss		-7dB	
Output Return Loss		-7dB	
Spec Temp		25C	





AT-PA-5565-1620

55-65GHz Power Amplifier, $P_{sat}=+20dBm$

Mechanical Information

Item	Description
Input Port	WR-15
Output Port	WR-15
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	100g
Size:	40x25X20 mm

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+9V
RF Input Power	+12dBm
Operating Temperature	0 to +50C
Storage Temperature	-65 to +150C

Notes:

1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.

Part Number Selection Guide

Item	Description
PN	Stand Module with DC Power Supply
PN-LCBT	L ow Cost, C ompact B ench- T op, +220V Supply with AC/DC Adapter



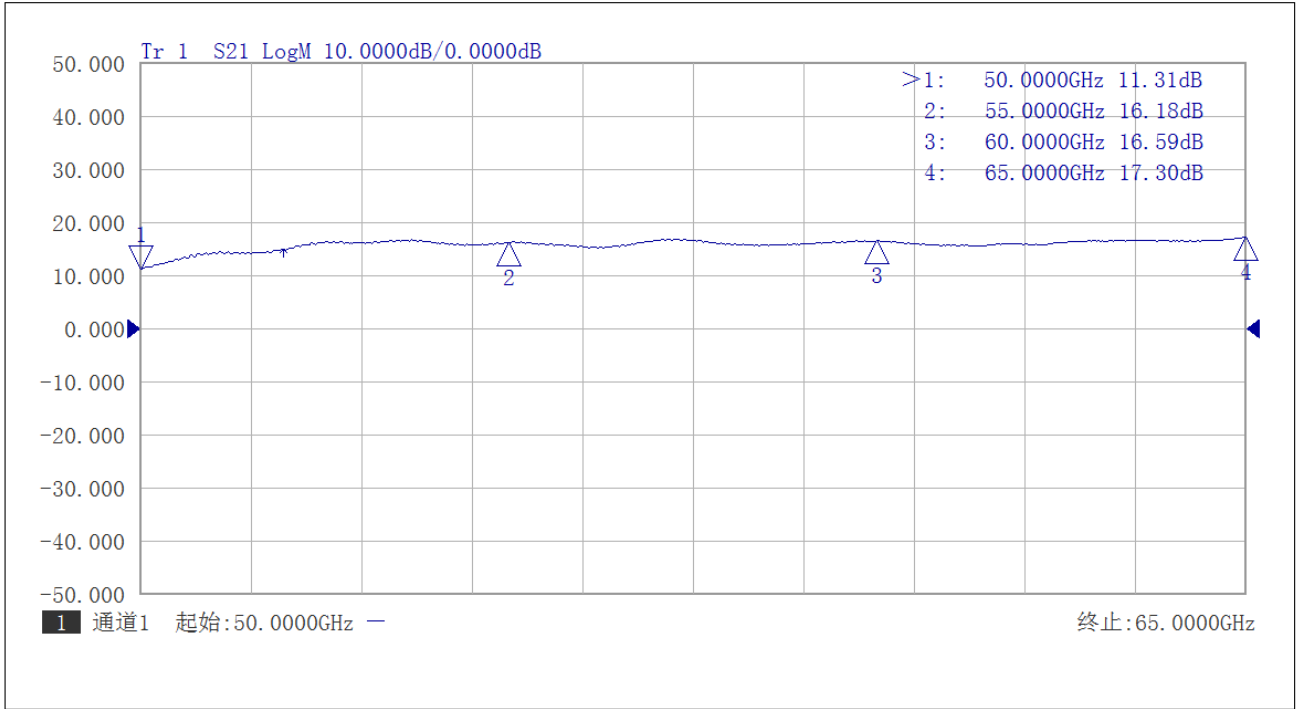


AT-PA-5565-1620

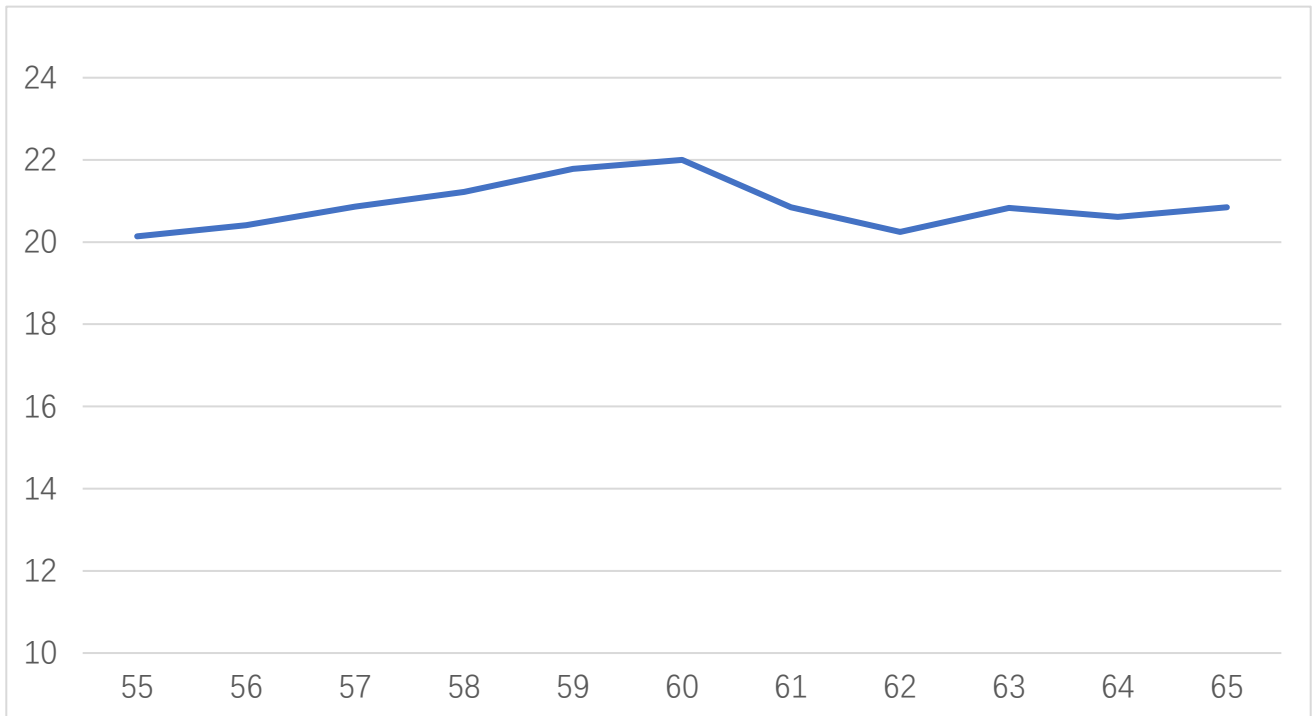
55-65GHz Power Amplifier, $P_{sat}=+20dBm$

Test Data (25C)

Vdd=+5V, Idd=270mA without RF. Idd=470mA at Psat.

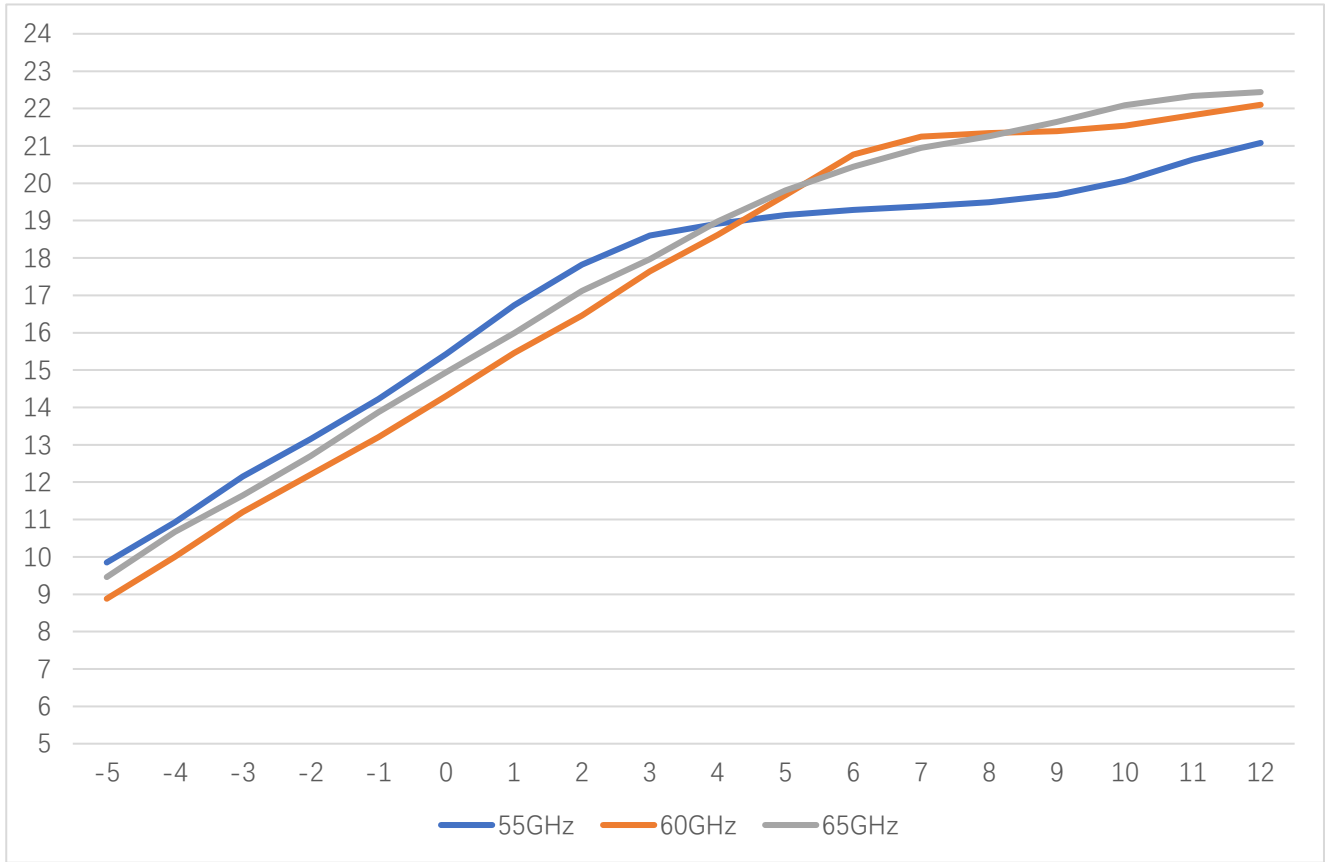


Gain VS Frequency



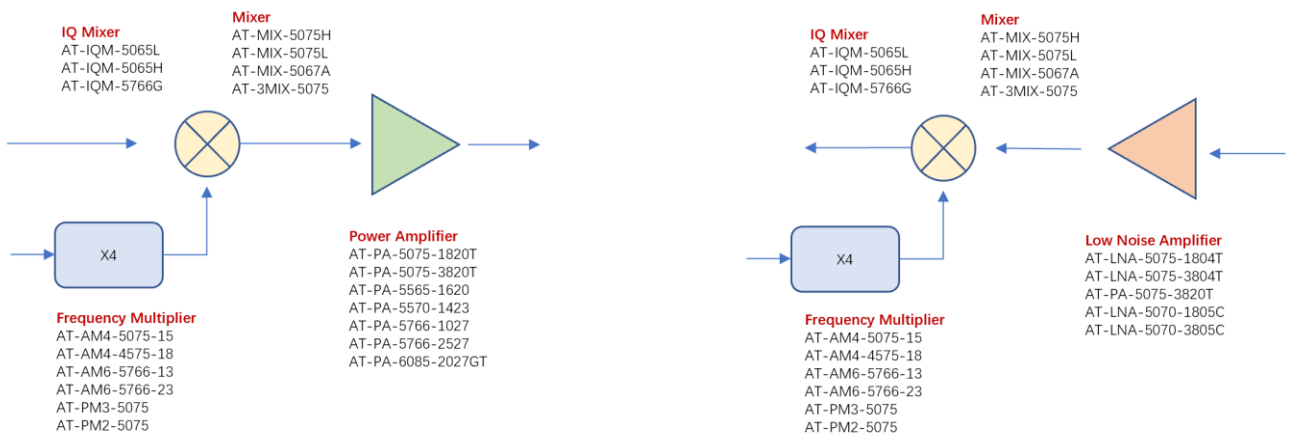
Pout vs Frequency





Pout vs Pin at 55/60/65GHz

V Band 50-75GHz



Dimension:(unit in mm)

